

What is claimed is:

1. A method for making a signal transmission tube, comprising disposing a reactive polymeric material within a confinement tube and leaving a portion of the tube interior unoccu-
5 pied.

2. The method of claim 1 wherein the interior of the confinement tube is substantially free of pulverulent reactive material.

10 3. The method of claim 1 wherein the reactive polymeric material comprises a GAP material.

4. The method of claim 3 wherein the reactive polymeric material comprises a GAP resin that has been cross-linked with a multifunctional dipolarophile material.

15 5. The method of claim 1, claim 3 or claim 4 comprising forming the confinement tube and disposing a layer of paint on the interior surface of the confinement tube, wherein the paint comprises the reactive polymeric material.

20 6. The method of claim 1, claim 3 or claim 4 extruding the confinement tube over an elongate rod that comprises the reactive polymeric material.

25 7. A signal transmission tube comprising a reactive polymeric material disposed within a confinement tube, wherein the reactive polymeric material is configured to leave a portion of the interior of the confinement tube unoccupied.

8. The signal transmission tube of claim 7 wherein the interior of the confinement tube is substantially free of pulverulent reactive material.

30 9. The signal transmission tube of claim 8 wherein the reactive polymeric material comprises a GAP material.

10. The signal transmission tube of claim 7 or claim 9 comprising a layer of paint on the interior surface of the confinement tube, the paint comprising the reactive polymeric material.

5 11. The signal transmission tube of claim 7 or claim 9 comprising a reactive polymeric material in the form of a rod disposed within the confinement tube.

12. The signal transmission tube of claim 11 wherein the rod has a high surface area configuration.

10 13. The signal transmission tube of claim 12 wherein the rod comprises a longitudinal bore therethrough.

14. A method for making a signal transmission tube comprising extruding a reactive
15 polymeric material into a tubular form.

15. The method of claim 14 further comprising extruding a sheath over the tubular reactive polymeric material.

20 16. The method of claim 15 wherein the sheath is configured to be fractured by the reaction of the reactive polymeric material.

17. The method of claim 15 wherein the sheath is configured to be consumed by the reaction of the reactive polymeric material.

25 18. The method of any one of claims 14-16 wherein the reactive polymeric material comprises a GAP material.

19. A signal transmission tube comprising a reactive polymeric material in the form of
30 a tube.

20. The signal transmission tube of claim 19 wherein the interior the tube is substantially free of pulverulent reactive material.

21. The signal transmission tube of claim 20 further comprising a sheath disposed over the reactive polymeric material.

22. The signal transmission tube of claim 21 wherein the sheath is configured to be
5 fractured by the reaction of the reactive polymeric material.

23. The signal transmission tube of claim 21 wherein the sheath is configured to be consumed by the reaction of the reactive polymeric material.

10 24. The signal transmission tube of claim 19 wherein the reactive polymeric material comprises a GAP material.

25. The signal transmission tube of claim 24 comprising a GAP resin that has been cross-linked by a multifunctional dipolarophile material.